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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,228	01/08/2004	Kirk W. Wolfgram		5723
7590	10/15/2004		EXAMINER	
Kirk W. Wolfgram 814 Norton Lane NE Rochester, MN 55906			VALENTI, ANDREA M	
		ART UNIT	PAPER NUMBER	
			3643	

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/753,228	WOLFGRAM, KIRK W.
	Examiner	Art Unit
	Andrea M. Valenti	3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 January 2004.  
 2a) This action is **FINAL**.                                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-14 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,114,185 to Gallagher.

Regarding Claims 1 and 8, Gallagher teaches an electric animal deterrent (Col.1 line 10) for use with a power source comprising: a high voltage pulse generator supplied by the power source; a timing mechanism for controlling the output pulse rate of said high voltage pulse generator, a ground terminal connected to the output of said high voltage pulse generator for connection to a ground rod electrically connected to the underlying ground system, and a high voltage output terminal also connected to the output of said high voltage pulse generator for connection to a separate un-insulated electrical conductor placed directly on the ground for the purpose of deterring animals (Gallagher Fig. 1 and admitted prior art page 10 second paragraph of applicant's specification, applicant has not claimed in either independent claim any difference in circuitry).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,184,790 to Gerig and U.S. Patent No. 6,519,131 to Beck.

Regarding Claims 1 and 8, Gerig teaches an electric animal deterrent (Gerig Col.1 line 12) for use with a power source (Gerig #28) comprising: a high voltage pulse generator (Gerig #56) supplied by the power source; a timing mechanism (Gerig the AC voltage cycle Col. 4 line 20-25) for controlling the output pulse rate of said high voltage pulse generator, a ground terminal (Gerig #62) connected to the output of said high voltage pulse generator for connection to a ground rod electrically connected to the underlying ground system, and a high voltage output terminal also connected to the output of said high voltage pulse generator for connection to a separate un-insulated electrical conductor (Gerig Fig. 1 #16 and 18).

Gerig is silent on placing the deterrent in contact with the ground for the purpose of deterring animals. However, Beck teaches that it is old and notoriously well-known to place an un-insulated electrical conductor in contact with the ground (Beck Fig. 1 #58). It would have been obvious to one of ordinary skill in the art to modify the teachings of Gerig with the teachings of Beck for the advantage of preventing livestock from escaping when the gate is not properly closed (Beck Col. 1 line 10-15).

Regarding Claims 2 and 9, Gerig as modified teaches the output impedance of the high voltage pulse generator is lower than the impedance of the electrical conductor laying on the ground connected to the high voltage output terminal with reference to the

ground terminal and the underlying ground system in which the ground terminal is electrically connected (Gerig impedance less than 200 Ohms Col. 3 line 39 and Beck 30,000 Ohms for electrical conductor Col. 3 line 15-20).

Regarding Claims 3 and 10, Gerig as modified teaches the output impedance of the high voltage pulse generator is substantially lower than the impedance of an animal making contact with the electrical conductor connected to the high voltage output terminal and the underlying ground system in which the ground terminal is electrically connected (Gerig Col. 3 line 39 200 Ohms is less than applicant's page 6 second paragraph).

Regarding Claims 4 and 11, Gerig as modified inherently teaches the energy delivered to an animal making contact with both the electrical conductor connected to the high voltage output terminal and the underlying ground system is significantly less than the energy delivered to an impedance equal to the output impedance of the high voltage pulse generator (these teachings are inherent because the amount of current delivered is inversely proportional to the impedance; a higher impedance naturally results in a lower energy transfer).

Regarding Claims 5 and 12, Gerig as modified teaches the conductor placed on the ground and connected to the high voltage output terminal is a bare wire (Gerig #58).

Regarding Claims 6 and 13, Gerig as modified teaches the conductor placed on the ground and connected to the high voltage output terminal is a bare wire covered by an electrically conductive thermoplastic material of higher resistivity than the bare wire (Beck Col. 3 line 25-34).

Regarding Claims 7 and 14, Gerig as modified teaches the conductor placed on the ground and connected to the high voltage output terminal is a conductive shield on the outside of a cable (Beck #44 and 46).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,767,592; U.S. Patent No. 2,555,180; U.S. Patent No. 3,197,916; U.S. Patent No. 2,899,174; U.S. Patent No. 2,512,740; U.S. Patent No. 5,302,945; U.S. Patent No. 5,877,949; U.S. Patent No. 6,020,658; U.S. Patent No. 4,859,868; U.S. Patent No. 5,790,023; U.S. Patent No. 4,274,123; U.S. Patent No. 4,969,418; U.S. Patent No. 5,158,039; U.S. Patent No. 6,371,054; U.S. Patent No. 3,392,247; U.S. Patent No. 4,949,216; U.S. Patent No. 5,072,915; U.S. Patent No. 5,107,620; U.S. Patent No. 1,023,599; U.S. Patent No. 5,949,636; U.S. Patent No. 520,510; U.S. Patent No. 2,633,337; and United Kingdom Patent GB 2192323.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 703-305-3010. The examiner can normally be reached on 7:30am-5pm M-F; Alternating Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 703-308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Andrea M. Valenti*  
Andrea M. Valenti  
Patent Examiner  
Art Unit 3643

29 September 2004

*Robert P. Swiatek*  
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